### PATENT COOPERATION TREATY

# **PCT**

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PCT-2004-196	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/JP2004/019025	International filing date (day/month/year) 20 December 2004 (20.12.2004)	Priority date (day/month/year) 22 December 2003 (22.12.2003)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant AISIN SEIKI KABUSHIKI KAISHA				

1.	This international preliminary re International Searching Authorit		I) is issued by the International Bureau on behalf of the	
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.			
	In the attached sheets, any reference to the international preliminary in		the International Searching Authority should be read as a reference er I) instead.	
3.	This report contains indications	relating to the following items	s:	
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opin applicability	nion with regard to novelty, inventive step and industrial	
	Box No. IV	Lack of unity of invention		
	Box No. V		Article 35(2) with regard to novelty, inventive step or industrial explanations supporting such statement	
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the inter	national application	
	Box No. VIII	Certain observations on th	e international application	
4.			gnated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but er Article 23(2), before the expiration of 30 months from the priority	
-	· ————————————————————————————————————			
			Date of issuance of this report 22 August 2006 (22.08.2006)	
	The International Bure		Authorized officer	
	34, chemin des Col		Yoshiko Kuwahara	

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Form PCT/IB/373 (January 2004)

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### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHOR	RITY	ANSI		
To:			PCT PTON	
			RITTEN OPINION OF THE TIONAL SEARCHING AUTHORITY	
			(PCT Rule 43bis.1)	
		Date of mailing (day/month/year)		
Applicant's or agent's file reference		FOR FURTHER	ACTION	
PCT-2004-196			See paragraph 2 below	
International application No.	International filing date (	'day/month/year)	Priority date (day/month/year)	
PCT/JP2004/019025 20.12.2004			22.12.2003	
Applicant  AISIN SEIKI KABUSHIK  1. This opinion contains indications related to the Box No. I Basis of the Box No. II Priority  Box No. III Non-establic	eting to the following items		vive step and industrial applicability	
	ty of invention	5.20 10 10 101.7,	application	
Box No. V Reasoned s	•		novelty, inventive step or industrial tement	
Box No. VI Certain doc	cuments cited			
Box No. VII Certain def	ects in the international app	plication		
Box No. VIII Certain obs	ervations on the internation	nal application		
International Preliminary Examining than this one to be the IPEA and the this International Searching Authority of this opinion is, as provided above	Authority ("IPEA") except chosen IPEA has notified y will not be so considered to be a written priate, with amendments, n of 22 months from the prince.	t that this does not ap the International Bur on opinion of the IPE before the expiration	ll be considered to be a written opinion of the ply where the applicant chooses an Authority other reau under Rule 66.1 bis(b) that written opinions of A, the applicant is invited to submit to the IPEA and of 3 months from the date of mailing of Form expires later.	
3. For further details, see notes to Form	PCT/ISA/220.			
Name and mailing address of the ISA/JP		Authorized officer		
		Telephone No.		

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/019025

Box	c No. I	Basis of this opinion
1.		regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.
		This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under
	_	Rule 12.3 and 23.1(b)).
2.		regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ation, this opinion has been established on the basis of:
	a.	type of material -
		a sequence listing
		table(s) related to the sequence listing
	ъ.	format of material
		in written format
		in computer readable form
	c.	time of filing/furnishing
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
3.		In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4.	Addi	tional comments:
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#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/JP2004/019025

Box	citations and expla		ale 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; pporting such statement	<del></del>
l.	Statement			
	Novelty (N)	Claims	3-5	YES
		Claims	1, 2	NO
	Inventive step (IS)	Claims	3,5	YES
		Claims	1, 2, 4	NO
	Industrial applicability (IA)	Claims	1-5	YES
		Claims		NO

Citations and explanations:

Document 1: JP 2002-161719 A (Denso Corporation), 07 June 2002, paragraph 0022, Figs. 1 and 3 (Family: none)

The inventions relating to claims 1 and 2 are described in document 1 cited in the ISR (paragraph 0022, Figs. 1 and 3); therefore, they do not appear to be novel or involve an inventive step. The point that one end of a coiled spring is locked with a locking plate that serves as a housing member, and the other end thereof is locked with a locking groove formed in a front plate of a vane that serves as a rotor member is disclosed in document 1.

The invention relating to claim 4 does not appear to involve an inventive step based on document 1 cited in the ISR. In a locking groove formed in the front plate of a vane described in document 1, providing a recess for a coiled spring would be easy for a party skilled in the art.

The configuration of the inventions relating to claims 3 and 5 wherein the other end of a torsion coiled spring is sandwiched between a locking groove and positioning pin is not described in any of the documents cited in the ISR; nor would it be obvious to a party skilled in the art.